

Amendments to the Claims

The listing of claims will replace all prior versions and listings of claims in the application.

1. *(Original)* A vibration isolation system for at least partially damping and isolating vibrations of a body, the system comprising:
 - a plurality of active isolator devices mechanically coupled to the body; and
 - a control system configured to control the active isolator devices, wherein the control system is configured to:
 - decouple vibrations in modal directions;
 - determine a modal compensation signal for each modal direction;
 - recouple each modal compensation signal into an active isolator control signal for each active isolator device; and
 - stabilize at least one unstable natural mode of the body.
2. *(Original)* The vibration isolation system according to claim 1, wherein the at least one unstable natural mode stabilized by the control system is directed substantially vertically.
3. *(Original)* The vibration isolation system according to claim 1, wherein the body is positioned on a base frame by air mounts.

4. (*Original*) The vibration isolation system according to claim 1, wherein a passive isolator device and an active isolator device engage the body at the same location on the body.

5. (*Original*) The vibration isolation system according to claim 1, wherein the system comprises a plurality of sensors to detect vibrations of the body.

- 6-20. (*Canceled*)

21. (*Withdrawn*) A lithographic apparatus, comprising:
 - an illumination system configured to provide a beam of radiation;
 - a support configured to support a patterning device, the patterning device configured to impart the beam with a pattern in its cross-section;
 - a substrate table configured to hold a substrate;
 - a projection system configured to project the patterned beam onto a target portion of the substrate; and
 - a vibration isolation system for at least partially damping and isolating vibrations of the projection system, the system comprising:
 - a plurality of active isolator devices mechanically coupled to the projection system and a control system configured to control the active isolator devices, wherein the control system is configured to:
 - decouple vibrations in modal directions;

determine a modal compensation signal for each modal
direction;

recouple each modal compensation signal into an active
isolator control signal for each active isolator
device; and

stabilize at least one unstable natural mode of the body.

22. *(Withdrawn)* An apparatus according to claim 21, wherein the at least one unstable natural mode stabilized by the control system is directed substantially vertically.
23. *(Withdrawn)* An apparatus according to claim 21, wherein the projection system is positioned on a base frame by air mounts.
24. *(Withdrawn)* An apparatus according to claim 21, wherein a passive isolator device and an active isolator device engage the projection system at the same location on the projection system.
25. *(Withdrawn)* An apparatus according to claim 21, further comprising a plurality of sensors to detect vibrations of the projection system.